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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,753	12/30/2003	Michael Paul Wagner	1301-026	2695

26108 7590 06/16/2006

DANIELS DANIELS & VERDONIK, P.A.
SUITE 200 GENERATION PLAZA
1822 N.C. HIGHWAY 54 EAST
DURHAM, NC 27713

EXAMINER

MOAZZAMI, NASSER G

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,753

Applicant(s)

WAGNER ET AL.

Examiner

Nasser G. Moazzami

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 9, and 21-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to amendment submitted by applicant on 04/27/2006 with the following results.
2. Claims 5 and 14 have been canceled and new claims 21 and 22 has been added. Therefore, claims 1-4, 6-13, and 15-22 remain pending in this application.
3. The rejection of the claims 1-10 under 35 U.S.C. 112, second paragraph are withdrawn due to the correction by applicant.
4. The rejection of the claims 1,4, and 11-12 under double patenting rejection are withdrawn.

Response to Arguments

5. Applicant's arguments filed 04/27/2006 have been fully considered but they are not persuasive.

Applicant states that there is nothing in Selkirk that teaches the steps of invalidating entries in the array for at least one of the first and the second session when at least one of a new first session and a new second session in initiated and steps of assigning a unique session ID for each session. As it was previously stated, Selkirk

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discloses mapping tables that provides unique identification of location of the data, Selkirk further teaches creating an instant copy of the data when a write operation is performed on the original data and when a new data is to be written to a location in the initial storage area, the original data in that location is copied to the additional storage area and a new pointer is generated and stored in a pointer table to point to the old copy of data and the old pointer can be used to point to the new data. Therefore, the rejection of the claims deemed to be proper.

Claim Objections

6. Claim 22 is objected to because of the following informalities:

Line 1, "21" should be change to --20--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4, 6-8, and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Selkirk (US Patent Publication No. 2003/0005248).

As per claim 1, Selkirk discloses a method of creating point-in-time view of data on a disk, comprising: initiating from a host, a first session of writing data to a disk which affects a portion of the disk; initiating at least one second session of writing data to a disk at a time different from initiation of the first session, with said at least one second session of writing data affecting a portion of the disk **[first and second write operations (page 12, paragraphs 161-165)]**; creating and storing entries in an array on the disk which identify where data written to the disk during first and second sessions are located **[pointers in the table referencing original and copy data (page 12, paragraphs 161-165)]**; copying data in any portion of the disk corresponding to said first session which is to be affected by a write operation by said at least one second session **[copying old data]**; and invalidating said entries in said array for said at least one of said first and second session when at least one of a new first session and a new second session is initiated **[generating new pointers]**.

As per claims 2-3, and 10, Selkirk discloses a session sequence number being assigned to a session when a session is initiated, said sequence number is stored in said array, and as input and output operations are processed, the session sequence number is stored in a chunk allocation block **[it is inherent in the art that there has to be a sequence number, since there are different data sets (original and copy of the data)]**.

As per claim 4, Selkirk discloses that the second session write operation is copied from a source disk to be stored at a cache disk **[cache memory 208 (Fig. 2)]**.

As per claim 6, Sekirk discloses that sessions are assigned specific slots in the array, and wherein when a new session is to replace a corresponding prior session; it is assigned to the same slot in the array as the prior session **[fixed mapping (paragraph 80)]**.

As per claim 7, Sekirk discloses that said sessions are assigned session ID's, and wherein the session ID of a prior invalidated session is different from the session ID of a later corresponding session assigned to its same slot in the array **[changing pointers as the mapping changes (paragraph 86)]**.

As per claim 8, Sekirk discloses a direct linear map pointing to sections of the disk where data is located for each session **[pointers table and mapping of the entries]**.

As per claims 11-13, claims 11-13 encompass the same scope of the invention as those of claims 1-4, 6-8, and 10. Therefore, claims 11-13 are rejected for the same reasons as stated above with respect to claims 1-4, 6-8, and 10.

Allowable Subject Matter

9. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 15-20 are allowed. Claim 20 is objected to, but would be allowable if rewritten to overcome objection set forth in this office action.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasser G. Moazzami whose telephone number is (571) 272-4195. The examiner can normally be reached on 7:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NASSER MOAZZAMI
PRIMARY EXAMINER



06/09/2006